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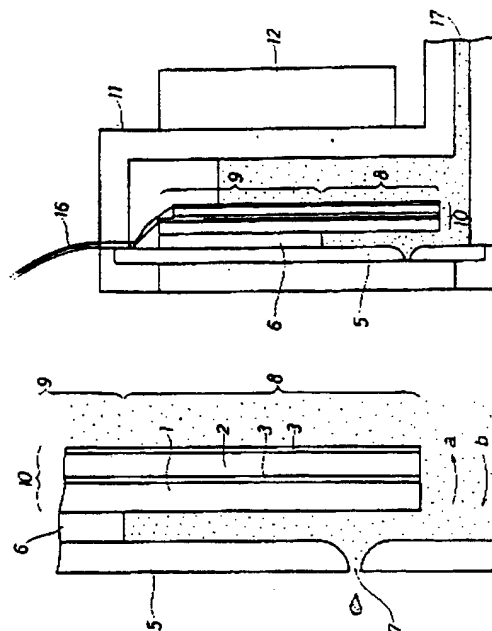
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TITLE : INK JET HEAD



ABSTRACT : PURPOSE: To secure a gap dimension between a vibrator and a nozzle plate at high accuracy by employing non-metal, wherein a thermal expansion coefficient extremely approximate to that of a piezoelectric element is easy to be obtained, for an elastic body, compared with conventional metal.

CONSTITUTION: The ink jet head is produced in such a way that the nozzle plate 5 composed from a metallic sheet possessing a plurality of nozzles, a spacer 6 forming the gap and a piezoelectric conversion part 10 are laminated and fixed. A frame 11 is provided opposite to the nozzle plate to maintain ink 17 around a piezoelectric converter, and a heating resistor 12 is provided outside the frame 11 to drop the viscosity of the ink. The piezoelectric converter 10 is composed of a vibrator 8 being a freely movable vibrating part 8 and a fixed part 9, and has an electrode 3 obtained by plating with a thin layer of Au on both sides of the piezoelectric element 2 composed of PZT. The comparatively-high rigidity non-metal wherein the thermal expansion coefficient extremely approximate to that of the piezoelectric element 2 is easy to be obtained is laminated as the elastic body 1 on the one side of the electrode.

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